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EXAMINER
ABRISHAMKAR, KAVEH

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/728,701	MUHLESTEIN, MARK
	Examiner	Art Unit
	Kaveh Abrishamkar	2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 December 2000.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-91 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-91 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the communication filed on December 1, 2000. Claims 1 – 39 were originally received for consideration. Preliminary amendments to the claims were filed, and claims 40-91 were added. Currently claims 1 – 91 are being considered.

Information Disclosure Statement

2. An initialed and dated copy of Applicant's IDS form 1449, Paper No. 4, is attached to the Office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 18-22, 37-43, 46-54, 57-60, 63-71, 74-77, 80-88, and 91are rejected under 35 U.S.C. 102(e) as being anticipated by Tso et al. (U.S. Patent 6,088,803).

Regarding claim 1, Tso discloses:

A method for operating a filer including the steps of:
receiving at a first location a request from a user for an object (Figure 2 item 20,
column 2 lines 62 - 67);
processing said request at a second location, wherein said step of processing
includes at least one of the following: (1) searching for one or more recognizable
patterns of data within said object, (2) compressing said object, and (3) encrypting said
object (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 - 10); and
responding to said request, wherein said step of responding includes delivery of
a response to said user (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Regarding claim 21, Tso discloses:

An apparatus for operating a filer including:
means for receiving at a first location a request from a user for an object (Figure
2 item 20, column 2 lines 62 - 67);
means for processing said request at a second location, wherein said means for
processing includes at least one of the following: (1) means for searching for one or
more recognizable patterns of data within said object, (2) means for compressing said
object, and (3) means for encrypting said object (Figure 2 item 40, column 2 lines 38 –
44, column 3 lines 1 - 10); and

means for responding to said request, wherein said means for responding includes delivery of a response to said user (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Regarding claim 40, Tso discloses:

A method of attempting to provide virus protection in a client-server environment, comprising the steps of:

receiving a request at a server for a file (Figure 2 item 20, column 2 lines 62 - 67);

sending an identifier for the file to a scanning device that scans the file for viruses (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 - 10);

receiving an indication from the scanning device as to whether or not the file is safe to send from the server (Figure 3 item 200, column 3 lines 48 – 54); and

responding to the request by sending the file if the indication is that the file is safe to send (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Regarding claim 46, Tso discloses:

A method of attempting to provide virus protection in a client-server environment, comprising the steps of:

maintaining a database that indicates if files served by a server are safe to send from the server (Figure 4 item 30, column 5 lines 1 – 43);

receiving a request at the server for a file (Figure 2 item 20, column 2 lines 62 - 67);

if the database indicates that the file is safe to send, responding to the request by sending the file (Figure 2 item 60, item 70, column 3 lines 1 – 10); and

if the database does not indicate that the file is safe to send, then sending an identifier for the file to a scanning device that scans the file for viruses, receiving an indication from the scanning device as to whether or not the file is safe to send from the server, and responding to the request by sending the file if the indication is that the file is safe to send (Figure 2 item 60, item 70, Figure 3 item 200, column 3 lines 1 – 10, column 3 lines 48 – 54).

Regarding claim 52, Tso discloses:

A method of attempting to provide virus protection in a client-server environment, comprising the steps of:

receiving from a server, at a scanning device connected to the server, an identifier for a file stored on mass storage for the server (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 - 10);

scanning the file for viruses (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 - 10); and

reporting an indication to the server as to whether or not the file is infected (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Regarding claim 57, Tso discloses:

A server that attempts to provide virus protection in a client-server environment, comprising:

a communication link to client devices (Figure 1 item 14, column 4 lines 3 – 10);
mass storage for files (Figure 4 item 30, column 5 lines 1 – 43); and
a processor that executes instructions in order to send requested files to the client devices, the instructions also including instructions

(a) to receive a request for a file (Figure 2 item 20, column 2 lines 62 – 67),
(b) to send an identifier for the file to a scanning device that scans the file for viruses (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 - 10),
(c) to receive an indication from the scanning device as to whether or not the file is safe to send from the server (Figure 3 item 200, column 3 lines 48 – 54), and
(d) to respond to the request by sending the file if the indication is that the file is safe to send (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Regarding claim 63, Tso discloses:

A server that attempts to provide virus protection in a client-server environment, comprising:

a communication link to client devices (Figure 1 item 14, column 4 lines 3 – 10);
mass storage for files (Figure 4 item 30, column 5 lines 1 – 43); and
a processor that executes instructions in order to send requested files to the client devices, the instructions also including instructions

(a) to maintain a database that indicates if files served by a server are safe to send from the server (Figure 4 item 30, column 5 lines 1 – 43),

(b) to receive a request at the server for a file (Figure 2 item 20, column 2 lines 62 – 67),

(c) if the database indicates that the file is safe to send, to respond to the request by sending the file (Figure 2 item 60, item 70, column 3 lines 1 – 10), and

(d) if the database does not indicate that the file is safe to send, then to send an identifier for the file to a scanning device that scans the file for viruses, to receive an indication from the scanning device as to whether or not the file is safe to send from the server, and to respond to the request by sending the file if the indication is that the file is safe to send (Figure 2 item 60, item 70, Figure 3 item 200, column 3 lines 1 – 10, column 5 lines 1 – 13).

Regarding claim 69, Tso discloses:

A scanning device that attempts to provide virus protection for a server in a client-server environment, comprising:

a communication link to the server (Figure 1 item 16, column 5 lines 56- 63); and

a processor that executes instructions, the instructions including instructions

(a) to receive from the server an identifier for a file stored on mass storage for the server (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 – 10),

(b) to scan the file for viruses (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 – 10), and

(c) to report an indication to the server as to whether or not the file is infected (Figure 3 item 200, column 3 lines 48 – 54).

Regarding claim 74, Tso discloses:

Storage containing information including instructions, the instructions executable by a processor to attempt to provide virus protection in a client-server environment, the instructions comprising the steps of:

receiving a request at a server for a file (Figure 2 item 20, column 2 lines 62 - 67);

sending an identifier for the file to a scanning device that scans the file for viruses (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 - 10),

receiving an indication from the scanning device as to whether or not the file is safe to send from the server (Figure 3 item 200, column 3 lines 48 – 54); and

responding to the request by sending the file if the indication is that the file is safe to send (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Regarding claim 80, Tso discloses:

Storage containing information including instructions, the instructions executable by a processor to attempt to provide virus protection in a client-server environment, the instructions comprising the steps of:

maintaining a database that indicates if files served by a server are safe to send from the server (Figure 4 item 30, column 5 lines 1 – 43);

receiving a request at the server for a file (Figure 2 item 20, column 2 lines 62 - 67);

if the database indicates that the file is safe to send, responding to the request by sending the file (Figure 2 item 60, item 70, column 3 lines 1 – 10); and

if the database does not indicate that the file is safe to send, then sending an identifier for the file to a scanning device that scans the file for viruses, receiving an indication from the scanning device as to whether or not the file is safe to send from the server, and responding to the request by sending the file if the indication is that the file is safe to send (Figure 2 item 60, item 70, Figure 3 item 200, column 3 lines 1 – 10, column 5 lines 1 – 13).

Regarding claim 86, Tso discloses:

Storage containing information including instructions, the instructions executable by a processor to attempt to provide virus protection in a client-server environment, the instructions comprising the steps of:

receiving from a server, at a scanning device connected to the server, an identifier for a file stored on mass storage for the server (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 – 10) ;

scanning the file for viruses (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 – 10); and

reporting an indication to the server as to whether or not the file is infected (Figure 3 item 200, column 3 lines 48 – 54).

Regarding claim 91, Tso discloses:

Storage containing information including instructions, the instructions executable by a processor to operate a filer, the instructions comprising the steps of:
receiving at a first location a request from a user for an object (Figure 2 item 20, column 2 lines 62 - 67);
processing said request at a second location, wherein said step of processing includes at least one of the following: (1) searching for one or more recognizable patterns of data within said object, (2) compressing said object, and (3) encrypting said object (Figure 2 item 40, column 2 lines 38 – 44, column 3 lines 1 - 10);
responding to said request, wherein said step of responding includes delivery of a response to said user (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Claim 2 is rejected as applied above in rejecting claim 1. Furthermore, Tso discloses:

The method of claim 1 wherein said request is in an electronic form (column 2 lines 62 – 67).

Claim 3 is rejected as applied above in rejecting claim 1. Furthermore, Tso discloses:

The method of claim 1, wherein said object is a file (column 2 line 62 – column 3 line 5).

Claim 18 is rejected as applied above in rejecting claim 1. Furthermore, Tso discloses:

The method of claim 1, wherein said delivery of a response is said file (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Claim 19 is rejected as applied above in rejecting claim 1. Furthermore, Tso discloses:

The method of claim 1, wherein said delivery of a response includes modification to said user that said file is unavailable (Figure 3 item 200, column 3 lines 48 – 54).

Claim 20 is rejected as applied above in rejecting claim 1. Furthermore, Tso discloses:

The method of claim 1, wherein said step of responding to said request includes sending said user a copy of said scan report (Figure 3 item 200, column 3 lines 48 – 54).

Claim 22 is rejected as applied above in rejecting claim 21. Furthermore, Tso discloses:

The apparatus of claim 21, wherein said object is a file (column 2 line 62 – column 3 line 5).

Claim 37 is rejected as applied above in rejecting claim 21. Furthermore, Tso discloses:

The apparatus of claim 21, wherein said delivery of a response is delivery of said file (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Claim 38 is rejected as applied above in rejecting claim 21. Furthermore, Tso discloses:

The apparatus of claim 21, wherein said delivery of a response includes delivery of notification to said user that said file is unavailable (Figure 3 item 200, column 3 lines 48 – 54).

Claim 39 is rejected as applied above in rejecting claim 21. Furthermore, Tso discloses:

The apparatus of claim 21, wherein said responding to said request includes sending said user some portion of said scan report (Figure 3 item 200, column 3 lines 48 – 54).

Claim 41 is rejected as applied above in rejecting claim 40. Furthermore, Tso discloses:

A method as in claim 40, wherein the scanning device indicates that the file is safe to send if the scanning device determines that the file is not infected with any viruses (Figure 3 item 200, column 3 lines 48 – 54).

Claim 42 is rejected as applied above in rejecting claim 40. Furthermore, Tso discloses:

A method as in claim 40, wherein the request is received from and the file is sent to a client device (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Claim 43 is rejected as applied above in rejecting claim 40. Furthermore, Tso discloses:

A method as in claim 40, wherein the server is a web server (Figure 1 item 7, column 2 lines 19 – 25).

Claim 47 is rejected as applied above in rejecting claim 46. Furthermore, Tso discloses:

A method as in claim 46, wherein maintaining the database further comprises the steps of:

tracking received indications from the scanning device (column 5 lines 1 – 63);

and

tracking accesses to the file (column 5 lines 1 – 63).

Claim 49 is rejected as applied above in rejecting claim 46. Furthermore, Tso discloses:

A method as in claim 46, wherein the scanning device indicates that the file is safe to send if the scanning device determines that the file is not infected with any viruses (Figure 3 item 200, column 3 lines 48 – 54).

Claim 50 is rejected as applied above in rejecting claim 46. Furthermore, Tso discloses:

A method as in claim 46, wherein the request is received from and the file is sent to a client device (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Claim 51 is rejected as applied above in rejecting claim 46. Furthermore, Tso discloses:

A method as in claim 46, wherein the server is a web server (Figure 1 item 7, column 2 lines 19 – 25).

Claim 53 is rejected as applied above in rejecting claim 52. Furthermore, Tso discloses:

A method as in claim 52, further comprising the step of changing, deleting, or otherwise modifying the file based on a result of scanning the file for viruses (column 4 lines 50 – 67).

Claim 54 is rejected as applied above in rejecting claim 52. Furthermore, Tso discloses:

The method as in claim 52, wherein the server is a web server (Figure 1 item 7, column 2 lines 19 – 25).

Claim 58 is rejected as applied above in rejecting claim 57. Furthermore, Tso discloses:

A server as in claim 57, wherein the scanning device indicates that the file is safe to send if the scanning device determines that the file is not infected with any viruses (Figure 3 item 200, column 3 lines 48 – 54).

Claim 59 is rejected as applied above in rejecting claim 57. Furthermore, Tso discloses:

A server as in claim 57, wherein the request is received from and the file is sent to a client device (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Claim 60 is rejected as applied above in rejecting claim 57. Furthermore, Tso discloses:

A server as in claim 57, wherein the server is a web server (Figure 1 item 7, column 2 lines 19 – 25).

Claim 64 is rejected as applied above in rejecting claim 63. Furthermore, Tso discloses:

A server as in claim 63, wherein the instructions to maintain the database further comprise instructions to track received indications from the scanning device, and to track accesses to the file (column 5 lines 1 – 63).

Claim 66 is rejected as applied above in rejecting claim 63. Furthermore, Tso discloses:

A server as in claim 63, wherein the scanning device indicates that the file is safe to send if the scanning device determines that the file is not infected with any viruses (Figure 3 item 200, column 3 lines 48 – 54).

Claim 67 is rejected as applied above in rejecting claim 63. Furthermore, Tso discloses:

A server as in claim 63, wherein the request is received from and the file is sent to a client device (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Claim 68 is rejected as applied above in rejecting claim 63. Furthermore, Tso discloses:

A server as in claim 63, wherein the server is a web server (Figure 1 item 7, column 2 lines 19 – 25).

Claim 70 is rejected as applied above in rejecting claim 69. Furthermore, Tso discloses:

A scanning device as in claim 69, wherein the instructions further comprise instructions to change, delete, or otherwise modify the file based on a result of scanning the file for viruses (column 4 lines 50 – 67).

Claim 71 is rejected as applied above in rejecting claim 69. Furthermore, Tso discloses:

 A scanning device as in claim 69, wherein the server is a web server (Figure 1 item 7, column 2 lines 19 – 25).

Claim 75 is rejected as applied above in rejecting claim 74. Furthermore, Tso discloses:

 Storage as in claim 74, wherein the scanning device indicates that the file is safe to send if the scanning device determines that the file is not infected with any viruses (Figure 3 item 200, column 3 lines 48 – 54).

Claim 76 is rejected as applied above in rejecting claim 74. Furthermore, Tso discloses:

 Storage as in claim 74, wherein the request is received from and the file is sent to a client device (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Claim 77 is rejected as applied above in rejecting claim 74. Furthermore, Tso discloses:

 Storage as in claim 74, wherein the server is a web server (Figure 1 item 7, column 2 lines 19 – 25).

Claim 81 is rejected as applied above in rejecting claim 80. Furthermore, Tso discloses:

 Storage as in claim 80, wherein maintaining the database further comprises the steps of:

tracking received indications from the scanning device (column 5 lines 1 – 63);
and

tracking accesses to the file (column 5 lines 1 – 63).

Claim 83 is rejected as applied above in rejecting claim 80. Furthermore, Tso discloses:

Storage as in claim 80, wherein the scanning device indicates that the file is safe to send if the scanning device determines that the file is not infected with any viruses (Figure 3 item 200, column 3 lines 48 – 54).

Claim 84 is rejected as applied above in rejecting claim 80. Furthermore, Tso discloses:

Storage as in claim 80, wherein the request is received from and the file is sent to a client device (Figure 2 item 60, item 70, column 3 lines 1 – 10).

Claim 85 is rejected as applied above in rejecting claim 80. Furthermore, Tso discloses:

Storage as in claim 80, wherein the server is a web server (Figure 1 item 7, column 2 lines 19 – 25).

Claim 87 is rejected as applied above in rejecting claim 86. Furthermore, Tso discloses:

Storage as in claim 86, wherein the instructions further comprise the step of changing, deleting, or otherwise modifying the file based on a result of scanning the file for viruses (column 4 lines 50 – 67).

Claim 88 is rejected as applied above in rejecting claim 86. Furthermore, Tso discloses:

Storage as in claim 86, wherein the server is a web server (Figure 1 item 7, column 2 lines 19 – 25).

Claim 48 is rejected as applied above in rejecting claim 47. Furthermore, Tso discloses:

A method as in claim 47, wherein a tracked indication in the database that the file is safe to send is cancelled if the file has changed since the tracked indication was incorporated into the database (column 5 lines 1 – 63).

Claim 65 is rejected as applied above in rejecting claim 64. Furthermore, Tso discloses:

A server as in claim 64, wherein a tracked indication in the database that the file is safe to send is cancelled if the file has changed since the tracked indication was incorporated into the database (column 5 lines 1 – 63).

Claim 82 is rejected as applied above in rejecting claim 81. Furthermore, Tso discloses:

Storage as in claim 81, wherein a tracked indication in the database that the file is safe to send is cancelled if the file has changed since the tracked indication was incorporated into the database (column 5 lines 1 – 63).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-17, 23-36, 44-45, 55-56, 61-62, 72-73, 78-79, and 89-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tso et al. (U.S. Patent 6,088,803) in view of Bates et al. (U.S. Patent 6,721,721).

Claim 44 is rejected as applied above in rejecting claim 40. Furthermore, Tso discloses:

The method as in claim 40. Tso does not explicitly teach that the scanning device is one of a cluster of devices connected to the server that function similarly to the scanning device. Bates teaches a virus-scanning environment wherein the scanning device is one of a cluster of scanning devices that can be used to scan for viruses (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits “the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers” (column 3 lines 38 – 55). Further, Bates states, “by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus

status information may be generated and/or the timeliness of updates to existing virus status information may be improved" (column 3 lines 51 – 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to combine the teachings of Tso with the cluster of virus scanning devices of Bates to achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 55 is rejected as applied above in rejecting claim 52. Furthermore, Tso discloses:

A method as in claim 52. Tso does not explicitly teach that the scanning device is one of a cluster of devices connected to the server that function similarly to the scanning device. Bates teaches a virus-scanning environment wherein the scanning device is one of a cluster of scanning devices that can be used to scan for viruses (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits "the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers" (column 3 lines 38 – 55). Further, Bates states, "by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved" (column 3 lines 51 – 55). Therefore it would have

been obvious to one of ordinary skill in the art at the time the applicant's invention was made to combine the teachings of Tso with the cluster of virus scanning devices of Bates to achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 61 is rejected as applied above in rejecting claim 57. Furthermore, Tso discloses:

A server as in claim 57. Tso does not explicitly teach that the scanning device is one of a cluster of devices connected to the server that function similarly to the scanning device. Bates teaches a virus-scanning environment wherein the scanning device is one of a cluster of scanning devices that can be used to scan for viruses (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits "the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers" (column 3 lines 38 – 55). Further, Bates states, "by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved" (column 3 lines 51 – 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to combine the teachings of Tso with the cluster of virus scanning devices of

Bates to achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 72 is rejected as applied above in rejecting claim 69. Furthermore, Tso discloses:

A scanning device as in claim 69. Tso does not explicitly teach that the scanning device is one of a cluster of devices connected to the server that function similarly to the scanning device. Bates teaches a virus-scanning environment wherein the scanning device is one of a cluster of scanning devices that can be used to scan for viruses (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits “the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers” (column 3 lines 38 – 55). Further, Bates states, “by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved” (column 3 lines 51 – 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant’s invention was made to combine the teachings of Tso with the cluster of virus scanning devices of Bates to achieve the benefits of reduction of processing power at the scanning device,

diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 78 is rejected as applied above in rejecting claim 74. Furthermore, Tso discloses:

Storage as in claim 74. Tso does not explicitly teach that the scanning device is one of a cluster of devices connected to the server that function similarly to the scanning device. Bates teaches a virus-scanning environment wherein the scanning device is one of a cluster of scanning devices that can be used to scan for viruses (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits “the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers” (column 3 lines 38 – 55). Further, Bates states, “by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved” (column 3 lines 51 – 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant’s invention was made to combine the teachings of Tso with the cluster of virus scanning devices of Bates to achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 89 is rejected as applied above in rejecting claim 86. Furthermore, Tso discloses:

Storage as in claim 86. Tso does not explicitly teach that the scanning device is one of a cluster of devices connected to the server that function similarly to the scanning device. Bates teaches a virus-scanning environment wherein the scanning device is one of a cluster of scanning devices that can be used to scan for viruses (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits “the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers” (column 3 lines 38 – 55). Further, Bates states, “by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved” (column 3 lines 51 – 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant’s invention was made to combine the teachings of Tso with the cluster of virus scanning devices of Bates to achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 4 is rejected as applied above in rejecting claim 3. Furthermore, Tso discloses:

The method of claim 3. Tso does not explicitly describe the use of a processing cluster to process files and generate scan reports. Bates teaches creating an access path to a processing cluster, processing a file in the processing cluster, and generating a scan report that is responsive to the processing of the file in the processing cluster (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits “the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers” (column 3 lines 38 – 55). Further, Bates states, “by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved” (column 3 lines 51 – 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant’s invention was made to combine the teachings of Tso with the cluster of virus scanning devices of Bates to achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 23 is rejected as applied above in rejecting claim 22. Furthermore, Tso discloses:

The apparatus of claim 22. Tso does not explicitly describe the use of a processing cluster to process files and generate scan reports. Bates teaches creating an access path to a processing cluster, processing a file in the processing cluster, and generating a scan report that is responsive to the processing of the file in the processing cluster (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits "the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers" (column 3 lines 38 – 55). Further, Bates states, "by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved" (column 3 lines 51 – 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to combine the teachings of Tso with the cluster of virus scanning devices of Bates to achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 45 is rejected as applied above in rejecting claim 44. Tso does not explicitly describe a cluster of interconnected computers. Bates teaches that the cluster of devices is a cluster of interconnected personal computers (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). The logic for combination is given above in claim 44.

Claim 56 is rejected as applied above in rejecting claim 55. Tso does not explicitly describe a cluster of interconnected computers. Bates teaches that the cluster of devices is a cluster of interconnected personal computers (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). The logic for combination is given above in claim 55.

Claim 62 is rejected as applied above in rejecting claim 61. Tso does not explicitly describe a cluster of interconnected computers. Bates teaches that the cluster of devices is a cluster of interconnected personal computers (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). The logic for combination is given above in claim 61.

Claim 73 is rejected as applied above in rejecting claim 72. Tso does not explicitly describe a cluster of interconnected computers. Bates teaches that the cluster of devices is a cluster of interconnected personal computers (column 3 lines 38 – 55,

column 4 lines 50-55, column 8 lines 16 – 29). The logic for combination is given above in claim 72.

Claim 79 is rejected as applied above in rejecting claim 78. Tso does not explicitly describe a cluster of interconnected computers. Bates teaches that the cluster of devices is a cluster of interconnected personal computers (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). The logic for combination is given above in claim 78.

Claim 90 is rejected as applied above in rejecting claim 89. Tso does not explicitly describe a cluster of interconnected computers. Bates teaches that the cluster of devices is a cluster of interconnected personal computers (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). The logic for combination is given above in claim 89.

Claim 5 is rejected as applied above in rejecting claim 4. Tso does not explicitly discloses the method of creating an access path including sending the ID and path of said file from said filer to said processing cluster. Bates discloses sending the ID and the path of said file from said filer to said processing cluster (column 6 line 65 – column 7 line 19). It would have been obvious to send the ID and path of the file to the processing cluster following the logic used above in rejecting the parent claims. Also, it would have been obvious since the files are stored in a database along with results of

virus scans in both the inventions of Tso and Bates, that a ID is needed to identify the file and its resultant virus scan in a database.

Claim 9 is rejected as applied above in rejecting claim 4. Tso does not explicitly describe the use of a round robin processing method in a cluster. Bates teaches processing files in a processing cluster using a round robin method (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits “the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers” (column 3 lines 38 – 55). Further, Bates states, “by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved” (column 3 lines 51 – 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant’s invention was made to combine the teachings of Tso with the round robin processing cluster of virus scanning devices of Bates to achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 10 is rejected as applied above in rejecting claim 4. Furthermore, Tso discloses:

Processing said file in parts. Tso does not explicitly disclose the file is processed in parts by more than one device in said processing cluster. Bates teaches processing files in a processing cluster (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits “the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers” (column 3 lines 38 – 55). Further, Bates states, “by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved” (column 3 lines 51 – 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant’s invention was made to combine the teachings of Tso with the processing cluster of virus scanning devices of Bates to process the file in parts and achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 11 is rejected as applied above in rejecting claim 4. Furthermore, Tso discloses:

The method of claim 4, wherein all files stored on said filer are scanned in a logical continuous manner (column 3 lines 1 – 54).

Claim 12 is rejected as applied above in rejecting claim 4. Furthermore, Tso discloses:

The method of claim 4, wherein said scan report contains a set of status data relating to said processing of file (column 3 lines 39 – 54).

Claim 24 is rejected as applied above in rejecting claim 23. Tso does not explicitly disclose the method of creating an access path including sending the ID and path of said file from said filer to said processing cluster. Bates discloses sending the ID and the path of said file from said filer to said processing cluster (column 6 line 65 – column 7 line 19). It would have been obvious to send the ID and path of the file to the processing cluster following the logic used above in rejecting the parent claims. Also, it would have been obvious since the files are stored in a database along with results of virus scans in both the inventions of Tso and Bates, that a ID is needed to identify the file and its resultant virus scan in a database.

Claim 28 is rejected as applied above in rejecting claim 23. Tso does not explicitly describe the use of a round robin processing method in a cluster. Bates teaches processing files in a processing cluster using a round robin method (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits “the responsibility for generating virus status information, as well as the processing horsepower required to

generate the virus status information, to be allocated among the multiple computers” (column 3 lines 38 – 55). Further, Bates states, “by distributing the virus checking responsibilities in this manner, a comparatively greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved” (column 3 lines 51 – 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant’s invention was made to combine the teachings of Tso with the round robin processing cluster of virus scanning devices of Bates to achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 29 is rejected as applied above in rejecting claim 23. Furthermore, Tso discloses:

Processing said file in parts. Tso does not explicitly disclose the file is processed in parts by more than one device in said processing cluster. Bates teaches processing files in a processing cluster (column 3 lines 38 – 55, column 4 lines 50-55, column 8 lines 16 – 29). Both Bates and Tso pertain to methods of virus scanning and reporting and are therefore analogous arts. Bates states that using multiple computers to scan for virus information permits “the responsibility for generating virus status information, as well as the processing horsepower required to generate the virus status information, to be allocated among the multiple computers” (column 3 lines 38 – 55). Further, Bates states, “by distributing the virus checking responsibilities in this manner, a comparatively

greater volume of virus status information may be generated and/or the timeliness of updates to existing virus status information may be improved" (column 3 lines 51 – 55).

Therefore it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to combine the teachings of Tso with the processing cluster of virus scanning devices of Bates to process the file in parts and achieve the benefits of reduction of processing power at the scanning device, diversifying the source of virus status information, and as a result, increasing the timeliness of virus status information and the volume of virus status information.

Claim 30 is rejected as applied above in rejecting claim 23. Furthermore, Tso discloses:

The apparatus of claim 23, wherein all files stored on said filer are scanned in a logical continuous manner (column 3 lines 1 – 54).

Claim 31 is rejected as applied above in rejecting claim 23. Furthermore, Tso discloses:

The apparatus of claim 23, wherein said scan report contains a set of status data relating to said processing of said file (column 3 lines 39 – 54).

Claim 6 is rejected as applied above in rejecting claim 5. Furthermore, Tso discloses:

The method of claim 5, wherein said step of sending is accomplished using non-uniform memory access (column 5 lines 1 – 63).

Claim 7 is rejected as applied above in rejecting claim 5. Furthermore, Tso discloses:

The method of claim 5, wherein said step of sending is accomplished using a communications network (column 5 lines 1 – 63).

Claim 8 is rejected as applied above in rejecting claim 5. Furthermore, Tso discloses:

The method of claim 5, wherein said step of sending is accomplished using a direct connection (column 5 lines 1 – 63).

Claim 13 is rejected as applied above in rejecting claim 12. Furthermore, Tso discloses:

The method of claim 12, wherein said status data includes at least one data element identifying the presence or non-presence of a virus in said file (column 3 lines 39 – 54).

Claim 25 is rejected as applied above in rejecting claim 24. Furthermore, Tso discloses:

The apparatus of claim 24, wherein said step of sending is accomplished using non-uniform memory access (column 5 lines 1 – 63).

Claim 26 is rejected as applied above in rejecting claim 24. Furthermore, Tso discloses:

The apparatus of claim 24, wherein said step of sending is accomplished using a communications network (column 5 lines 1 – 63).

Claim 27 is rejected as applied above in rejecting claim 24. Furthermore, Tso discloses:

The apparatus of claim 24, wherein said sending is accomplished using a direct connection (column 5 lines 1 – 63).

Claim 32 is rejected as applied above in rejecting claim 31. Furthermore, Tso discloses:

The apparatus of claim 31, wherein said status data includes at least one data element identifying the presence or non-presence of a virus in said file (column 3 lines 39 – 54).

Claim 33 is rejected as applied above in rejecting claim 31. Furthermore, Tso discloses:

The apparatus of claim 31, wherein said report is transferred to said filer (Figure 3 item 200, column 3 lines 48 – 54).

Claim 14 is rejected as applied above in rejecting claim 13. Furthermore, Tso discloses:

The method of claim 13, wherein said report is transferred to said filer (Figure 3 item 200, column 3 lines 48 – 54).

Claim 34 is rejected as applied above in rejecting claim 33. Furthermore, Tso discloses:

The apparatus of claim 33, wherein said report is stored in a first database (column 5 lines 1 – 26).

Claim 15 is rejected as applied above in rejecting claim 14. Furthermore, Tso discloses:

The method of claim 14, wherein said report is stored in a first database (column 5 lines 1 – 26).

Claim 35 is rejected as applied above in rejecting claim 34. Furthermore, Tso discloses:

The apparatus of claim 34, wherein the necessity for subsequent scanning of said file is a function of determining whether said database contains said report relating to said file and whether said file has changed since last accessed (column 5 lines 1 – 43).

Claim 16 is rejected as applied above in rejecting claim 15. Furthermore, Tso discloses:

The method of claim 15, wherein the necessity for subsequent scanning of said file is a function of determining whether said database contains said report relating to said file and whether said file has changed since last accessed (column 5 lines 1 – 43).

Claim 36 is rejected as applied above in rejecting claim 35. Furthermore, Tso discloses:

The apparatus of claim 35, wherein the necessity for subsequent scanning of said file is a function of determining whether additional virus identification data files have been added to said processing cluster (column 5 lines 1 – 43).

Claim 17 is rejected as applied above in rejecting claim 16. Furthermore, Tso discloses:

The method of claim 16, wherein the necessity for subsequent scanning of said file is a function of determining whether additional virus identification data files have been added to said processing cluster (column 5 lines 1 – 43).

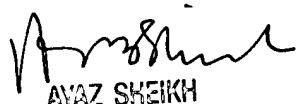
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Abrishamkar whose telephone number is 703-305-8892. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

KA
4/27/04


AYAZ SHEIKH
SUPPLY PATENT EXAMINER
TECHNOLOGY CENTER 2100